

## CLAIMS

1. A data distribution system comprising a first terminal having data and a second terminal, wherein the system distributes data adapting to the second terminal from the first terminal to the second terminal,

wherein the first terminal comprises:

a data recording means that records data of a plurality of formats;

a data distribution request receiving means that receives a distribution request of data adapting to the second terminal and that receives a URL at which information of the second terminal is recorded from the second terminal;

a terminal information acquiring means that acquires the information of the second terminal from the URL:

a data selecting means that selects data adapting to the second terminal on the basis of the acquired information of the second terminal; and

a data transmitting means that transmits the selected data to the second terminal, and

wherein the second terminal comprises:

a terminal information describing means that describes the information of the second terminal in tree structure;

a URL recording means that transmits the information of the second terminal described in tree structure to a predetermined URL to record the information at the URL;

a data distribution request means that requests the first terminal to distribute data adapting to the second terminal and that notifies the first terminal

of the URL; and

a data receiving means that receives the data from the first terminal.

2. A first terminal in a data distribution system that distributes data adapting to a second terminal from the first terminal having data to the second terminal, comprising:

a data recording means that records data of a plurality of formats;

a data distribution request receiving means that receives a distribution request of data adapting to the second terminal and that receives a URL at which the information of the second terminal from the second terminal;

a terminal information acquiring means that acquires the information of the second terminal from the URL;

a data selecting means that selects the data adapting to the other terminal on the basis of the acquired information of the second terminal; and

a data transmitting means that transmits the selected data to the second terminal.

3. A second terminal in a data distribution system that distributes data adapting to the second terminal from a first terminal having data to the second terminal, comprising:

a terminal information describing means that describes information of the second terminal in tree structure;

a URL recording means that transmits the information of the second terminal described in tree structure to a predetermined URL and that records the information at the URL;

a data distribution request means that requests the first terminal to distribute data adapting to the second terminal and that notifies the first terminal

of the URL; and

a data receiving means that receives the data from the first terminal.

4. A third terminal that, in a data distribution system that distributes data adapting to a second terminal from a first terminal having data to the second terminal, has a URL which can be accessed by the first and second terminals and records information of the second terminal, comprising:

a terminal information receiving means that tree structure description of information of the first terminal from the second terminal;

10 a terminal information recording means that records information of the second terminal; and

a terminal information transmission means that transmits the information of the second terminal to the first terminal in response to a distribution request of the information of the second terminal from the first terminal.

5. A data request method in a second terminal in a data distribution system that distributes data adapting to the second terminal from a first terminal having data to the second terminal, comprising the steps of:

constructing the second terminal;

describing information of the second terminal in tree structure;

20 transmitting the information of the second terminal described in tree structure to a predetermined URL to record the information;

requesting the first terminal to distribute data adapting to the second terminal and notifying the first terminal of the URL from the second terminal; and receiving data from the first terminal.

6. The data request method according to claim 5, wherein as the information of the second terminal described in tree structure, information related to basic

characteristics of the second terminal, information related to AV coding capability of the second terminal, and pieces of information related to a multimedia input/output of the second terminal are branched and described as branch information.

- 5      7.      The data request method according to claim 5, comprising the steps of:  
              selecting some branch information in tree structure of the information of  
              the second terminal; and  
              notifying the first terminal of a URL related to the selected branch  
              information to request the first terminal to distribute data to the second terminal.
- 10     8.      The data request method according to claim 5, comprising the steps of:  
              constructing the second terminal by selecting a CPU, an OS, a memory,  
              an output, and a VM (virtual machine) with respect to general characteristics;  
              constructing the second terminal by selecting USB, BlueTooth,  
              wireless802, and a serial or parallel data I/O (data input/output);
- 15               constructing the second terminal by selecting a storage medium such as a  
              MultiMedia card (MMC), a Compact Flash (registered trademark), a Secure Disk  
              (SD), a MemoryStick (MS), a hard disk (HD), a DVD, a VCD, a Zip disk, or a  
              flexible disk;
- constructing the second terminal by selecting a supporting tool such as a  
 20               global positioning system (GPS), a Browser, Intellectual Property Management  
              and Protection tools (IPMP tools), an RELtool (Rights Expression Language  
              Tool), or a meta data tool;
- constructing the second terminal according to a predetermined AV  
              decoding format;
- 25               constructing the second terminal according to a predetermined image

format supporting;

constructing the second terminal according to a predetermined text format supporting;

constructing the second terminal according to a predetermined system  
5 format supporting;

constructing the second terminal by providing a predetermined audio output for reproducing sound or voice;

constructing the second terminal by providing a predetermined video output for displaying a video or an image; and

10 constructing the second terminal by providing a predetermined text output for displaying a text.

9. The data request method according to claim 8, wherein the method of constructing the second terminal further includes the steps of:

constructing the second terminal according to a predetermined AV  
15 encoding format;

constructing the second terminal by providing a predetermined audio input for acquiring sound or voice;

constructing the second terminal by providing a predetermined video input for acquiring a video or an image; and

20 constructing the second terminal by providing a predetermined text input for inputting a text.

10. The data request method according to claim 8, wherein the step of constructing the second terminal according to the predetermined AV decoding format further includes the steps of:

25 selecting an audio decoding supporting format;

selecting a video decoding supporting format;

determining a bit rate for audio decoding;

determining a bit rate for video decoding;

5       determining the maximum bit rate for audio decoding in coding at a  
variable bit rate;

          determining the maximum bit rate for video coding in coding at a variable  
bit rate;

          determining an average bit rate for audio decoding in coding at a variable  
bit rate;

10       determining an average bit rate for video decoding in coding at a variable  
bit rate; and

          determining a limited buffer size for audio or video decoding.

11.   The data request method according to claim 9, wherein the step of  
constructing the second terminal according to the predetermined AV encoding  
15   format further includes the steps of:

          selecting an audio encoding supporting format;

          selecting a video encoding supporting format;

          determining a bit rate for audio encoding;

          determining a bit rate for video encoding;

20       determining the maximum bit rate for audio encoding in coding at a  
variable bit rate;

          determining the maximum bit rate for video encoding in coding at a  
variable bit rate;

          determining an average bit rate for audio encoding in coding at a variable  
25   bit rate;

determining an average bit rate for video encoding in coding at a variable bit rate; and

determining a limited buffer size for audio or video encoding.

12. The data request method according to claim 8, wherein the step of constructing the second terminal according to the predetermined system format further includes the steps of:

selecting MPEG2 system format supporting;

selecting MPEG4 system format supporting;

selecting predetermined file format supporting; and

selecting predetermined communication protocol supporting.

13. The data request method according to claim 8, wherein the step of selecting the MPEG2 system format supporting further includes the steps of:

determining MPEG2 transport system (TS) format supporting; and

determining MPEG2 program system (PS) format supporting.

14. The data request method according to claim 12, wherein the step of selecting the MPEG4 system format supporting further includes the steps of:

determining format supporting of MPEG4 system part 1;

determining format supporting of MPEG4 system part 11;

determining format supporting of MPEG4 system part 12;

determining format supporting of MPEG4 system part 13;

determining format supporting of MPEG4 system part 14;

determining format supporting of MPEG4 system part 15; and

determining format supporting of MPEG4 system part 16.

15. The data request method according to claim 12, wherein the step of selecting the predetermined file format supporting further includes the steps of:

determining MP4 file format supporting;  
determining QuickTime file format supporting;  
determining AVi file format supporting;  
determining MP2 file format supporting;  
5 determining MP21 file format supporting;  
determining ASF file format supporting;  
determining another file format used in another area; and  
determining a future file format.

16. The data request method according to claim 12, wherein the step of  
10 selecting the predetermined communication protocol further includes the steps  
of:

determining RTP protocol supporting;  
determining H.323 protocol supporting;  
determining SIP protocol supporting;  
15 determining HTTP protocol supporting;  
determining TCP/IP protocol supporting; and  
determining another protocol supporting.

17. A data distribution method in a first terminal in a data distribution system  
that distributes data adapting to a second terminal from a first terminal having  
20 data to the second terminal, comprising the steps of:

receiving a distribution request of data adapting to the second terminal  
from the second terminal and receiving a URL related to information of the  
second terminal;  
acquiring information of the second terminal described in tree structure  
25 from the URL;



selecting data adapting to the second terminal on the basis of the acquired information; and

transmitting the selected data to the second terminal.

18. The data distribution method according to claim 17, wherein as the information of the second terminal described in tree structure, information related to basic characteristics of the second terminal, information related to AV coding capability of the second terminal, and pieces of information related to a multimedia input/output of the second terminal are branched and described as branch information.

19. The data distribution method according to claim 17, wherein the step of selecting data adapting to the second terminal on the basis of the acquired information in the first terminal includes the steps of:

parsing the information of the second terminal described in tree structure and obtained from the URL;

selecting data adapting to the second terminal on the basis of branch information described in tree structure and obtained by the parsing.